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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MUSA, ABDELNABI O

ART UNIT

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2446

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/748,774	FREY ET AL.	
	Examiner	Art Unit	
	ABDELNABI O. MUSA	2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/03/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7,11-15,35-37,39,44-46,54,55 and 67-74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7,11-15,35-37,39,44-46,54,55 and 67-74 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/03/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Acknowledgment is made for the applicant's response and amendment filed on 11/03/2009.

Remarks

2. The claims are presented as follows:
- Claims 1, 35, 44-46, 54 amended.
 - Claims 4, 6, 8-10, 16-34, 38, 40-43, 47-53, 56-66 canceled.
 - Claims 69-74 new.
 - Claims 1-3, 5, 7, 11-15, 35-37, 39, 44-46, 54-55, 67-74 pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 7, 11-13, 35-37, 39, 44-46, 54-55, 67-74 rejected under 35 U.S.C. 103(a) as being unpatentable Viswanath et al. Pub. No. (US 2004/0019662 A1) in view of NPL "Java Management Extensions" by Steven Perry (hereinafter "Perry")

As per **claim 1** Viswanath teaches a method for monitoring one or more resources by a monitoring architecture, the method, comprising:

assigning (FIG.8) each of a plurality of runtime beans (runtime bean 280 FIG.6) to the respective one or more of a plurality of resources (204 FIG.5) to be monitored (assigning runtime beans to monitor resources [0024] [0127 FIG.6), wherein each of the plurality of runtime beans (runtime bean 280 FIG.6) to provide monitoring (monitoring 232 FIG.6) information regarding each (meta information) of the respective one or more resources (resource 204 FIG.6) to monitor bean (monitor bean 212 FIG.6) associated with the runtime bean (280 FIG.6) assigned to the respective resource (204 FIG.6), the monitor bean (250 FIG.4) being one of a plurality of monitor beans in the monitoring architecture (a set of monitor bean classes to monitor resource information [0024] [0047] [0068] FIG.4)

arranging the plurality of monitor beans ([0096] FIG.3) into a hierarchical tree structure (hierarchical relationships among the elements of the configuration data [0025] [0068] FIG.3) , wherein each of the monitor beans (monitor beans 224 FIG.6) to receive the monitoring information (meta-information 226 FIG.6) regarding the resource (resource 204 FIG.6) to be monitored from the runtime bean (runtime bean 280 FIG.6) assigned to the monitor bean (monitor bean 212 FIG.6) (each bean receive monitoring information regarding the data store from the runtime bean [0127] [0024] FIG.6), and wherein each of the plurality of monitor beans (monitor beans 224 FIG.6) in the hierarchical tree structure to be individually represented as a tree node of the hierarchical tree structure (hierarchical relationships among the elements of the configuration data [0025] [0068] FIG.3)

continues monitoring (monitoring 232 FIG.6), in real time, the plurality of resources (plurality of resources 204 FIG.4) via the plurality of runtime beans (runtime bean 280 FIG.6) respectively assigned to the plurality of resources (assigning runtime beans to monitor resources [0024] [0127 FIG.6]);

receiving by the server of the monitoring architecture (FIG.1B) the continues monitoring information (232 FIG.6) from the plurality of runtime beans (runtime bean 280 FIG.6) at the plurality of monitor beans (monitor beans 224 FIG.6) associated with the runtime beans (each bean receive monitoring information regarding the data store from the runtime bean [0127] [0128] FIG.6) , wherein the tree node associated with each monitor bean within the hierarchical tree structure (hierarchical relationships among the elements of the configuration data [0025] [0068]) provides individual reporting of the corresponding resource based on the monitoring information received by the monitor bean represented by the tree node (generated bean provide reporting for each of the assigned corresponding monitored/managed resource 204 based on its meta-information 226 [0070] [0071] FIG.4)

Viswanath fails to explicitly teach registering each of the monitor beans as a cluster by a server of the monitoring architecture, wherein the server to serve as a single point of entry for calling each of the plurality of runtime and monitor beans; and providing continues monitoring, in real time, of the plurality of resources.

However, Perry teaches a method for monitoring of system resources and associating each resource with a monitor managed bean utilizing a registry for handling manageable resources (M-Bean server) as well as several agent services, which

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themselves are M-Beans and thus are manageable. The combination of an instance of the M-Bean server, its registered M-Beans, and any agent services in use within a single point or a single Java Virtual Machine (JVM) is typically referred to as a JMX agent and providing continues monitoring in real time of the plurality of resources and alert interested parties about the workings of a resource ([1.2 JMX architecture] [1.2.1.6 JMX notifications] [6.1 M-bean server] FIG.1-1)

It would have been obvious to a person having ordinary skilled in the art at the time the invention was made to have modified Viswanath by the teaching of Perry to register each of the monitor beans by a server of the monitoring architecture wherein the server to serve as a single point of entry for calling each of the plurality of runtime and monitor beans and provide continues monitoring, in real time, of the plurality of resources to efficiently and effectively be able to manage the resources and maintain the status of each bean and be able to simultaneously and immediately notify interested parties about the inner status of resources

As per **claim 2** Viswanath teaches the method of claim 1, further comprising:

receiving a notification (240 FIG.5) from the runtime beans signaling availability of the monitoring information (event notification mechanism indicating availability of information [0030] [0099] FIG.7); and

requesting (302 FIG.7) the monitoring information from the runtime beans 346 FIG.9) in response to receiving the notification (requesting information about the resource from runtime beans [0051] [0107] FIG.9)

As per **claim 3** Viswanath teaches the method of claim 1, further comprising:

receiving a timer notification from a timer indicating availability of the monitoring information (event notification mechanism indicating availability of information [0078] [0132] FIG.7); and

requesting the monitoring information from the runtime beans in response to receiving the timer notification (requesting information about the resource from runtime beans [0051] [0113] FIG.10)

As per **claim 5** Viswanath teaches the method of claim 1, wherein the plurality of resources include one or more of Advanced Business Application Programming (ABAP) (222 [0027] [0050] FIG.4) resources (business logic application programming [0046] associated with an ABAP engine (management bean 212 [0091] FIG.3), and Java resources associated with a Java 2 Platform Enterprise Edition (J2EE) engine ([0010] [0094] FIG.4), kernel service resources, kernel interface resources, and kernel library resources ([0022] [0071])

As per **claim 7** Viswanath teaches the method of claim 1, further comprising communicatively interfacing (user interface 216 [0024] FIG.4) the hierarchical tree structure with a central database (central data store 204 [0018] [0080] FIG.4) and one or more client- level applications (client level applications [0027] [0053] FIGs.1) using a monitor service (232 FIG.6)

As per **claim 11** Viswanath teaches the method of claim 1, further comprising displaying (216 FIG.5) the monitoring information via a monitor viewer (information being displayed on the administrator User Interface [0046] FIG.5)

As per **claim 12** Viswanath teaches the method of claim 11, wherein the monitor viewer includes one or more of a customized visual administrator monitor viewer (customized administrator User Interface [0087] FIG.5), a Web-based monitor viewer [0124] and a Graphical User Interface (GUI)-based monitor viewer (216 [0124] FIG.5)

As per **claim 13** Viswanath teaches the method of claim 1, wherein the monitoring information includes one or more of a current monitoring status of the plurality of resources (generating components of the administrator to be used for monitoring and managing the system [0127] FIG.6), a monitoring history of the plurality of resources, and general information relating to the plurality of resources (monitoring meta-information [0024] [0046])

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim(s) 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Viswanath et al. Pub. No. (US 2004/0019662 A1) in view of Sylor et al. Pub. No. (US 2002/0186238 A1).

As per **claim 14** Viswanath teaches the method of claim 13, but fails to teach wherein the current monitoring status includes a color-coded indication of at least one of status of a resource being monitored among the plurality of resources, wherein the color-coded indication indicates the resource is nearing a critical value.

However, Sylor teaches a method for monitoring system resources whereas the interface includes a color selected from a plurality of colors representing a severity scale of the resource, associating the status with a severity includes using a status metric associated with the monitored resource profile ([0020] [0058] [0117]) in order to efficiently identify the monitored resources and maintain its status information ([0020] [0058] [0117] FIG.6)

It would have been obvious to a person having ordinary skilled in the art at the time the invention was made to have modified Viswanath by the teaching of Sylor to efficiently identify the monitored resources and maintain their status information ([0020] [0058] [0117] FIG.6)

As per **claim 15** Viswanath teaches the method of claim 13, but does not teach wherein the monitoring history includes monitoring history of the plurality of resources that is collected over a predetermined time period

However, Sylor teaches a method for monitoring system resources whereas the interface includes a color selected from a plurality of colors representing a severity scale of the resource, associating the status with a severity includes using a status metric associated with the monitored resource profile [0020] [0058] [0117] FIG.6)

It would have been obvious to a person having ordinary skilled in the art at the time the invention was made to have modified Viswanath by the teaching of Sylor to efficiently identify the monitored resources and maintain their status information ([0020] [0058] [0117] FIG.6)

Claims 35-37, 39, 44-46, 45-55, 67-68 are related to the same limitation set for hereinabove, where the difference used is the phrase “apparatus” in claims whereas the wordings of the claims were interchanged within the claim itself and some of the claims were presented as a combination of two or more previously presented claims. This change does *NOT* effect the limitation of the above treated claims. Adding these phrases to the claims and interchanging the wording *DID NOT* introduce new limitations to these claims, the citations from the prior art have been inserted as needed. Refer to the cited prior art for more details and further mapping. Therefore these claims were rejected for similar reasons as stated above.

As per **claim 69** Viswanath teaches the method of claim 1 further comprising:
retrieving a file having semantics and directives, wherein the semantics and directives for arranging the plurality of monitor beans into the hierarchical tree structure (hierarchical semantics into the configuration data [0061] [0108] [0151] FIG.11)

As per **claim 70** Viswanath teaches the method of claim 1 further comprising:
communicating the continuous monitoring information to a visual administrator for display (administration user interface to manage and monitor the beans [0024])

Claims 71-74 related to the same limitation set for hereinabove, where the difference used is the phrase “system” and “machine readable storage medium” in the claims whereas the wordings of the claims were interchanged within the claim itself and some of the claims were presented as a combination of two or more previously

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presented claims. This change does *NOT* effect the limitation of the above treated claims. Adding these phrases to the claims and interchanging the wording *DID NOT* introduce new limitations to these claims, the citations from the prior art have been inserted as needed. Refer to the cited prior art for more details and further mapping. Therefore these claims were rejected for similar reasons as stated above.

Response to Arguments

5. Applicant's arguments with respect to the above treated claim(s) have been considered but are moot in view of the new ground(s) of rejection.

NOTE: The Office is providing the applicant with only portions of NPL Java Management Extensions by Steven Perry, however, when responding to this Office Action, the applicant is advised to consider Java Management Extensions by Steven Perry in it's entirety. If the applicant can not obtain a copy of this NPL, the applicant is advised to contact the Examiner and a full copy will be provided to the applicant

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdelnabi O. Musa whose telephone number is 571-2701901. The examiner can normally be reached on Monday Thru Friday: 7:30am to 5:00pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on 571-2726798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. O. M./
Examiner, Art Unit 2446

/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2446